

ABSTRACT OF THE DISCLOSURE

A dielectric barrier discharge lamp drive circuit having a thickness so that sufficient mechanical strength of a glass plate is obtained and a relatively large illumination area. The drive circuit is driven at low voltage and reduces apparent current. The drive circuit applies a high frequency power to a flat panel discharge lamp (19) with a reactor (32). In a lighted state, a state close to a series resonance of the inductance of the reactor and an electrostatic capacity of the glass plate (11, 12) is set. The inductance value of the reactor is selected so that the frequency of the high frequency power is slightly smaller than the series resonance frequency, and the impedance of the load as viewed from an AC source (31) is set to the rated impedance. A high light emitting efficiency is obtained in such a configuration when Xe (xenon) gas that does not cause environmental problems is used as the discharge gas.